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FIFTIETH
ANNUAL REPORT
OF THE
Medical Officer of Health
OF THE
URBAN SANITARY AUTHORITY
OF THE
City of Worcester,
Year, 1923.

WORCESTER :
EBENEZER BAYLIS AND SON, TRINITY PRESS.

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*The Fiftieth Report of the Medical Officer
of Health,
being that for the Year 1923.*

*To the Urban Sanitary Authority of the
City and County of Worcester.*

Mr. Mayor, Aldermen and Councillors,

I have the honour to present my Report for the year 1923, being the Thirty-third Annual Report I have made to the City Council.

This Report is in the somewhat abbreviated form suggested during recent years by the Ministry of Health.

The Registrar General has estimated the population of the City in the middle of 1923 as 49,860, an increase of 620 over his estimate for 1922. The reasons for this increased estimate of population are given on page 6 of this Report.

The death-rate for the year was the lowest on record, 10.9 per 1,000 of the population. The lowest infant death-rate was also recorded, namely, 57 per 1,000 births. The year was one favourable to the health of the Citizens, but the low infant death-rate

has not been attained without years of hard work on the part of those engaged in the Maternity and Child Welfare department. No expenditure that your Authority makes will yield a better return than that spent on the care of the mothers and children.

The Chief Medical Officer of the Ministry of Health, Sir George Newman, in his Report for the year 1922, reviewing the causes of sickness and invalidity, points out that among the *insured* population during 1922 no less than 19½ million weeks' work was lost on account of sickness (including disablement). A great amount of this is preventable, and the chief causes are respiratory diseases, diseases of the heart, diseases of the nervous system, and tuberculosis. "The problem lying immediately before the Local Authorities responsible for the sound administration and practise of *preventive medicine* is, first to rear and maintain a healthy race of people ; secondly, to continue their attack upon infection and all forms of preventable sickness and invalidity ; and thirdly, to recognise that the public health is the primary asset of the nation's welfare, whether measured by employability and production, or by length of days and personal well being."

What is there that blocks the way of Local Authorities in rearing and maintaining a healthy race ? At the present time, chiefly the lack of houses. It is well known to those Members of the Council who are

on the Health Committee how the work is hampered in many directions by the want of houses. Infectious diseases spread more readily because the unhealthy overcrowding lessens the resistance of the individual to the attack of disease ; sickness is more prevalent and convalescence is longer and less complete ; ordinary decency in the family cannot in many cases be maintained ; and home life, of which as a nation we have been so justly proud, is no longer possible to many hundreds of our fellow Citizens. It will be seen on page 53 of this Report that only 214 houses have been erected during the last 7 years. The increase of population during these years was 860, and reckoning 5 persons to a family, these people would require 172 houses to decently house them. The advertisement of rooms at "The Castle" (the empty Gaol) offering accommodation for 14 families, brought 170 applications. These poor overcrowded Citizens were anxious to occupy cells rather than be huddled in the rooms they occupied. This fact gives some idea of existing conditions.

I have pleasure in recording the excellent work of the Chief Sanitary Inspector, Mr. Ralph Taylor, and that of the Assistant Inspectors.

I am,
Your obedient Servant,
MABYN READ.

May 10th, 1924.

General Statistics, 1923.

Area in Acres	...	...	...	...	...	3,662
Population, 1923	...	...	...	...	...	49,860
Number of structurally separate Dwellings (1921)						11,555
Rateable Value	...	...	...	...	...	£277,338
Sum represented by 1d. Rate			...	...	...	£1,053

*Average
of the
105 County
Boroughs
and
Great Towns.

Birth-rate per 1,000 of the population			18·6	20·4
Annual Death-rate	ditto	...	10·8	11·6
Tuberculosis (all kinds)	ditto	...	1·1	—
Typhoid Fever	ditto	...	·00	·01
Measles	ditto	...	·02	·15
Scarlet Fever	ditto	...	·00	·03
Diphtheria	ditto	...	·00	·09
Whooping Cough	ditto	...	·08	·12
Influenza	ditto	...	·02	·22
Infant Death-rate per 1,000 Births	...		57·0	72·0
Diarrhoea and Enteritis Death-rate per 1,000 Births (under 2 years)	...		9·6	9·9

In Table I. the figures of the death-rate and infant death-rate for 10 years will be seen, and in Table II. the various causes of the infant deaths are given.

*Taken from Report of the Registrar General.

Population.—The Registrar General has estimated the population of the City, as on June 30th, 1923, at 49,860. This estimate “has been based on the adjusted 1921 figures “after allowance for the varying rate of natural increase as “evidenced by the births and deaths in each area and of “migration as indicated from other sources of information “such as the changes in the numbers on the Parliamentary “Register and the migration returns obtained by the Board “of Trade.”

The Birth-rate was 18·5 per 1,000 of the population. This is lower than the rates for the three previous years. (See Table I.).

The Birth-rate for England and Wales was 19·7, and that for the 105 County Boroughs and Great Towns including London (among which Worcester is classed) was 20·4. The Births numbered 931, 455 males and 476 females. Of this number 36 were illegitimate births.

The Death-rate was 10·9 per 1000 of the population. This rate is lower than any recorded during the last 10 years. (See Table I.). The death-rate for England and Wales and for the 105 Great Towns was 11·6.

The deaths from diseases of the lungs (excluding Tuberculous diseases) were much fewer. There were only 6 deaths registered from Influenza, compared with 32 in 1922.

The Infant death rate per 1000 births was 57. This is the lowest rate recorded in this City. The average rate in

Worcester for the 5 years 1913-17 was 80, that for the 5 years 1918-22 was 61.

The rate for England and Wales was 69, and that for the 105 Great Towns was 72, both of which are the lowest rates recorded. The climatic conditions throughout the country must have been favourable to the preservation of infant life.

The causes of the deaths of infants are set out in Table II. It will be seen that more than one-half of the deaths occurred during the first 4 weeks of life, and 18 during the first week of life. Six of the total deaths occurred among 3 pair of twins, prematurely born.

The death-rate per 1,000 births of the legitimate infants was 55 ; that of the illegitimate infants was 111.

It is common knowledge that the conditions of comparative poverty due to continued unemployment, and the great overcrowding, must make against healthy child life. But these conditions are not detrimental to the infant up to the time of birth. The Medical Research Council of the Privy Council have recently issued a pamphlet* giving the results of an investigation into the effect of Maternal Social Conditions and Nutrition on the weight and length of the infant at birth. It is a remarkable fact that in hard times it is the mother who suffers and not the unborn child. "Nature's effort for reproduction is so strong that her care is all for the race or species to the neglect of the individual." "On the other hand, it is equally striking that certain maternal diseases that may not cause malnutrition (in the mother) but are due to some form of poisoning or impurity of the blood may result in the birth of feeble puny infants, as

*Medical Research Council, Special Report, Series No. 81.

“ instances of which may be mentioned Syphilis, the toxæmias
 “ of pregnancy with Kidney disease, alcoholic and industrial
 “ poisons and various disorders of the blood.”

It is in combating these diseases that the Ante-natal Clinics through the country are doing so much good. Similar enquiries have been made in Germany and Austria respecting the infants born during the latter part of the war, when the food supply of those countries was only one-third to one-half of that required for the maintenance of good health. The results of the investigations were similar, the babies *at birth* varying very little from the average baby born under normal conditions.

It will be seen in Table II. that more than one-half (28) of the total infant deaths occurred during the first 4 weeks of life, 18 of the 28 during the first week, and 11 during the first day of life. Here the percentage of the deaths occurring during the first 4 weeks of life is 53 of the total deaths under one year. This percentage has varied very little during the last 5 years. These deaths must in nearly every case be due to debility at birth. What further efforts can a Local Authority take to lessen these premature births ?

Dr. Andrews in her Report (page 39) has stated that the problem of the prevention of still births and of deaths from prematurity is closely allied. New methods of dealing with premature infants have been successfully practised in recent years, and should be made use of in Worcester. Post graduate teaching of the Midwives practising in the City should have a good influence in this direction, and would I believe be welcomed by the Midwives. The cost of this and of the practise of these new methods would be small in comparison with its value in saving infant life.

The Hospital Accommodation of the City remains the same as in recent years. The financial position of the General Infirmary does not, unfortunately, permit the re-opening of the two Wards that have been closed since the end of the war. Could these again be made use of, there would be sufficient Hospital accommodation for the City and districts around.

The City Water Supply.—The results of the weekly bacteriological examination of the water has been excellent throughout the year. On only two occasions (in April) did the micro-organisms per cubic centimeter exceed 100, and in 34 samples out of 52 these organisms were fewer than 50. On 7 occasions one B. Coli was found in 100 c.c.

The two new filters which were constructed during 1922 came into use during 1923.

Sanitary Inspection of the District.

The chief Sanitary Inspector, Mr. Ralph Taylor, has furnished the following information of work done during the year :—

Abatement of Nuisances.—It will be seen from the Summary given that a large amount of work has been accomplished.

The total number of nuisances, sanitary defects or contravention of Bye-laws reported was 5,730, to abate which it was necessary to serve 3,468 Request Notices and write

numerous letters to owners and occupiers. Further, in consequence of the Request Notices not being complied with, your Health Committee instructed me to serve 506 Statutory Notices.

In 23 instances I had obtained instructions from your Committee to institute legal proceedings ; and it was only after written intimation of the intended proceedings had been sent, that the necessary work was put in hand.

SUMMARY OF WORK DONE DURING 1923.

Number of Notices (Preliminary) issued	...	...	3,468
„ „ „ (Statutory) „	...	...	506
„ „ Complaints received and investigated	...	...	345
„ „ Letters sent with regard to Notices, &c.	...	...	824
„ „ Notices sent to Schools <i>re</i> Infectious Diseases	...	...	345
Rooms cleansed and limewashed...	...	...	489
Dilapidated walls, floors, windows, &c., repaired	...	...	384
Defective roofs and spouting repaired	...	...	304
Damp walls cured	...	...	110
Wash-houses repaired, cleansed and limewashed	...	...	179
„ floors and yards repaved and repaired	...	...	69
Glazed stoneware sinks fixed	...	...	39
Sink waste and rainwater pipes disconnected from drain	...	...	16
Drains opened and cleansed	...	...	77
Defective drains repaired or reconstructed	...	...	56
Glazed stoneware gulley traps fixed	...	...	50
Water closets repaired, cleansed and limewashed	...	...	117
„ „ flushing tanks repaired	...	...	46
„ „ provided with new basins and traps	...	...	44
Defective joints in pans, traps and flush pipes repaired	...	...	18
Nuisances from overcrowding abated	...	...	23
„ „ improper keeping of animals	...	...	12

Accumulation of manure removed	...	...	...	17
Houses provided with proper water supply	...	...	...	8
Sanitary dustbins provided	...	...	...	3,346
Miscellaneous	...	...	...	334
Waste of water reported to Water Inspector	...	...	...	31
No. of references to City Engineer with regard to dangerous buildings, paving of courts and foul street gullies	...	...	...	21
Emptying of ashpits and dustbins referred to Streets Superintendent	...	...	...	9
Rooms disinfected after infectious disease	...	...	...	173
Samples of food and drugs collected for City Analyst...	...	...	...	157
„ tap and well water collected for City Analyst	...	...	...	14

Refuse Removal.—An improvement of great value from a sanitary point of view has been commenced in connection with the storage of house refuse.

During the year, in consequence of Notices having been served, 3,346 dustbins have been provided.

Our practice is to call upon the person paying the rates of the house to provide the bin; but in cases where the owner before the Rent Act paid the rates, the Notice is sent to the owner, and in other cases to the occupier.

A considerable amount of work has been entailed in inspection and re-inspection of houses, issuing Preliminary Notices, Reports to Committees, issuing Statutory Notices, etc.

Factory and Workshop Act.—There are at present 214 Workshops (not including Bakehouses) on our Register.

Two new Workshops have been added during 1923, and 5 have been struck off, having given up.

During the year, I have had occasion to call the attention of the owners or occupiers to the following defects :—

Workshops not in a clean condition	...	...	4
Workshops not sufficiently ventilated	...	...	1
Accumulation of refuse	...	...	2
Defective condition of Water Closets	...	...	2
Defective floors, roof, &c.	...	...	2

In only one instance was it found that a young person under 18 years of age was being employed and no Abstract of the Factory and Workshop Act affixed in the Workshop. The attention of His Majesty's Inspector was called to this contravention.

Two Notices of infringements of the Public Health Acts were received from His Majesty's Inspector of Factories, and were immediately dealt with.

At the end of 1923, there were 48 occupied Bakehouses in the City. Of these, 10 are classed as Factories, and 2 as Underground Bakehouses. Most of the premises have been inspected and special attention was given to cleanliness of walls, floors, &c.

Common Lodging Houses.—There are 9 Registered Common Lodging Houses in the City, having accommodation for 181 lodgers.

5 of the houses take in men only.

2 of the houses take in married couples and men.

2 of the houses take in all persons.

The houses are regularly inspected and the Keepers (with one exception) do their best to keep them clean and in as good order as their structure will permit; but when it is remembered that some of the houses are the oldest in the City one may know that they cannot be considered anything like model places.

Houses Let in Lodgings.—At the end of 1923 there were 12 houses on our Register.

Each house has been visited at least twice during the year. The rooms contained in some cases a larger number of persons than is desirable; but as no better accommodation was obtainable owing to the great shortage of houses, no action was possible except to keep the rooms as clean and wholesome as the conditions allowed.

Offensive Trades.—There are 43 Offensive Trades as defined by the Local Government Board's Order of January, 1913, and Section 112 of the Public Health Act, 1875, carried on in the City, viz. :—

- 27 Fish Friers.
- 5 Tripe-boilers.
- 3 Fellmongers.
- 5 Rag and Bone Dealers.
- 1 Gut Scraper.
- 2 Hide, Skin and Fat Dealers.

During the year, one permission was granted for the trade of a Fish Frier to be commenced at Pitchcroft Lane.

The Health Committee refused to sanction the commencement of the trades of : 3 Fish Friers, 1 Rag and Bone Dealer, 3 Tripe-boilers, and 1 Gut Scraper.

One Rag and Bone Dealer and one Fish Frier have given up business.

In consequence of the inhabitants complaining that the Gut-scraping business at No. 48, Diglis Road was a nuisance and causing an effluvia injurious to health, a summons was issued against the persons responsible. The Magistrates dismissed the summons on the ground that defendants had "used the best practicable means for abating the nuisance." The defendants subsequently removed the offensive part of their business to a district outside the City.

Private Slaughter-houses.—The 25 Registered Private Slaughter-houses in use in the City are situated as follows :—

12 in The Shambles ; 2 in Sidbury, Droitwich Road, Lowesmoor ; one in Astwood Road, Hylton Road, Friar Street, Hood Street, Ombersley Road, St. John's, and The Tything.

In addition to the above, there are 7 Slaughter-houses which have not been used for some years, and there is no doubt that your Health Committee would institute proceedings if they were again used.

Under Section 30 of the Public Health (Amendment) Act, 1890, 2 changes of occupiers were notified.

Each of the Slaughter-houses is visited at least once a week, especially when killing is going on, and the meat killed there inspected as far as possible.

Generally speaking, the Bye-laws relating to the periodical limewashing of the walls, removal of refuse, &c., have been fairly well carried out.

Public Slaughter-houses.—The Public Slaughter-houses are situated in Croft Road ; they adjoin the Cattle Market and are close to a railway siding. They are under the control of the Health Committee. They consist of two slaughter-houses for beasts, one for sheep, and one for pigs. There are two well constructed Meat stores and good Lairage accommodation.

Mr. R. Taylor, Chief Sanitary Inspector, attends the Slaughter-houses each morning, and all meat and internal organs are inspected before removal from the Slaughter-houses.

The number of animals slaughtered during the last three years is as follows :

		Charges for Slaughtering.	To March 31st		
			1922.	1923.	1924.
Number of Beasts ...	1s. 6d.		781	938	1,142
„ „ Sheep ...	5d.		3,479	4,078	4,608
„ „ Calves ...	9d.		359	726	649
„ „ Pork Pigs	9d.		2,433	2,771	3,057
„ „ Bacon Pigs	1s. 6d.		274	218	
			<hr/>	<hr/>	<hr/>
			7,326	8,731	9,456
			<hr/>	<hr/>	<hr/>

		1922.	1923.	1924.
		£ s. d.	£ s. d.	£ s. d.
Amounts received for				
slaughtering ...	258 4 8	312 15 3	336 8 10	

Dairies, Cowsheds and Milkshops Order.—During the year, 11 additional persons have been registered to sell milk. This makes a total of 91 Retail Purveyors of Milk. Of these, 24 have their premises in the County, but retail milk in the City.

The names of three producers who have farms in the City but do not retail the milk, are also entered in the Register.

In two instances, registration was refused on account of unsuitable premises.

Improvements have been carried out to some of the Dairies by improving the ventilation, paving of floors, &c., and in three cases entirely new dairies have been built. We are gradually improving the standard of the old premises in which milk is kept in the City.

The whole of the dairy premises have been visited during the year, as occasion required, to enforce compliance with regard to cleanliness, storage of milk, &c.

There are the following Cowsheds within the City, viz. :—

Situation.			Name of Keeper.
Blanquettes Street	...	...	Mr. L. Gwilliam.
Hallow Road	...	...	Mr. W. J. Smith.
Moat Farm, Astwood Road	...		Mr. E. Farmer.
New Road	...	...	Mr. F. Hunt.
Newtown Road	...	...	Mr. Jeffreys.
Tolladine Road	...	...	Mr. C. Dipper.

Food.

Sale of Food and Drugs Act.—The total number of samples submitted to the Analyst was 157. Of these, 88 were taken under the Sale of Food and Drugs Acts, and 69 were Test Samples.

Of the 88 samples taken under the Act, 85 were certified to be genuine and 3 adulterated.

		1921.		1922.		1923.	
		Formal	Informal	Formal	Informal	Formal	Informal
Analyses	...	92	61	100	53	88	69
Adulterated	...	3	2	7	5	3	3
Adulterated per							
cent....	...	3.2	3.2	7.0	9.4	3.4	4.03
Amount of Costs							
and Fines	...	Nil.		£16	0 0	£7	0 0

The adulterated formal samples consisted of 2 Creams and 1 Milk, and the Informal or Test Samples, 3 Creams.

The action taken as regards the Creams are referred to in the Report under the Public Health (Milk and Cream) Regulations, but the Vendor was fined £5 under Section 3 of Sale of Food and Drugs Act, 1875, for selling Cream which was mixed with 0.6% of Boric Acid so as to render the same injurious to health.

Milk.--54 Samples were taken under the Act, 53 proved to be genuine and 1 was below the standard of the Board of Agriculture. Compared with previous years this must be regarded as highly satisfactory.

Sample No. 37 was deficient in fat to the extent of 6.6%. Samples taken by the County Authorities at place of delivery and direct from cow, proved also to be deficient in fat, and therefore no further action was taken.

Condensed Milk.—The Public Health (Condensed Milk) Regulations, 1923, came into force on 1st October, 1923.

The Regulations prescribe the manner in which the tin or receptacle containing Condensed Milk shall be labelled, i.e., whether—

- “ Condensed Full Cream Milk, Unsweetened,” or
- “ Condensed Full Cream Milk, Sweetened,” or
- “ Condensed Machine-Skimmed Milk (or Condensed Skimmed Milk) Unsweetened,” or
- “ Condensed Machine-Skimmed Milk (or Condensed Skimmed Milk) Sweetened.”

In the two latter cases, the label must have the words “ Unfit for Babies ” printed upon it. The label must also contain a statement as to the equivalent quantity of milk or skimmed milk which is equivalent to the contents of the tin.

The Regulations also lay down a definite standard of percentages of milk fat and milk solids which the Condensed Milk shall contain. This undoubtedly will simplify the Analyst's work in expressing an opinion as to whether a sample of Condensed Milk conforms to the Regulations or not.

Eight Samples of Condensed Milk were submitted for analysis and in each case the samples taken conformed to the requirements of the Regulations and were properly labelled.

Milk (Special Designations) Order 1923.

This Order came into operation on July 1st, 1923, and revoked all previous Orders.

The special designations are "Certified Milk," "Grade A (Tuberculin tested)," "Grade A," and "Pasteurised."

The Order lays down conditions subject to which licenses for selling milk of either designation may be granted.

No application for any licence has been made to this Authority either by a producer or seller of milk during the year.

In the House of Commons on April 2nd, 1924, it was stated by the Minister of Health that at the end of 1923, 55 producers in England had been licensed for Certified Milk, 46 for Grade A (Tuberculin tested), 50 for Grade A, and 57 for Pasteurised Milk. This is a very small proportion of the producers of milk in the country.

It is much to be regretted that no "designated" milk is on sale in Worcester, nor so far as I know is there any demand for it. Probably a demand for Grade A (Tuberculin tested) milk would soon create a producer of such milk.

It is highly desirable that more milk should be consumed of a wholesome and nutritious quality. The consumption per head in England is less than one-third of that in the United States.

It may be that the consumption of milk is small because of a general opinion that it is not produced under as cleanly conditions as might be, and under such unsatisfactory conditions the milk soon becomes sour. The standard of cleanliness in the production and handling of milk from its source to the consumer must be raised, and good organisation and continued care on the producer's part can readily effect this.

Public Health (Milk and Cream) Regulations, 1912 and 1917.—Report for the year ended 31st December, 1923 :—

1. Milk ; and Cream not sold as Preserved Cream :—

				(a) No. of Samples examined for the presence of a preservative.	(b) No. in which a preservative was reported to be present.
Milk	...	...	...	56	—
Cream	...	...	...	7	5

Vendor in one case was warned.

Vendor in one case was summoned and fined £7 in all.

2. Cream sold as Preserved Cream :—

(a) Instances in which samples have been submitted for analysis to ascertain if the statements on the label as to preservative were correct :—

(1) Correct statements made	...	...	5
(2) Statements incorrect	...	...	—
			—
			5
			—

(b) Determinations made of milk fat in Cream sold as Preserved Cream :—

(1) Above 35 per cent.	...	...	5
(2) Below 35 per cent.	...	...	—
			—
			5
			—

- (c) In one instance the type of the label " Not suitable for Infants or Invalids " was of smaller size than that shown in the Schedule of the Regulations.

The Vendor was warned.

Unsound Food.—During the year the following food has been destroyed as being diseased, unsound or unwholesome.

TUBERCULOSIS.

Cattle. 8 carcasses and organs.
 32 heads and tongues.
 18 all organs of 18 cattle.
 24 lungs.

Pigs. 3 carcasses and organs.
 23 heads and organs.
 8 heads.

OTHER DISEASES.

Cattle. 1 carcase and organs.
 11 heads and tongues.
 9 all organs of 9 cattle.
 5 lungs, 40 livers, 8 tripes.

Sheep. 9 carcasses and organs.
 33 livers.
 15 lungs.

Goat. 1 carcase and organs.

Pigs. 12 carcasses and organs.
 45 organs.

Calves 4 carcasses and organs.

Frozen Meat. 1425 lbs.

Meat. 1409 lbs.

Rabbits. 6

Fish. 1245 lbs.

21 tins of Fruit, Fish, Condensed Milk,
&c.

The total weight of food condemned was 6 tons 16 cwt. 28 lbs. With one exception, this food was voluntarily surrendered by the respective owners.

One butcher was fined £5 for exposing for sale the head and tongue of a bullock which was diseased.

Prevalence and Control of Infectious Diseases.

Smallpox.—No case occurred in the City during the year. In a neighbouring city some hundreds of cases were discovered, nearly all of a mild type. The epidemic continued for many months.

The Health Committee of the City Council did all in their power to protect the citizens. Chickenpox was made a disease that must be notified for a period of 3 months from July 11th. The Medical men of the City kindly notified voluntarily this disease for 3 weeks previous to the above date. Your Medical Officer was asked to see some doubtful

cases by the Medical men in attendance. All of them proved to be Chickenpox. A total of 161 cases of Chickenpox were notified. No deaths occurred.

The Guardians of the Worcester Union made arrangements for increased facilities for primary vaccination and for re-vaccination. Dr. Bennett, the Public Vaccinator, successfully vaccinated more than 1,100 persons ; about 30 per cent. of these were primary vaccinations. He was greatly helped in this work by the Nurses of the Voluntary Aid Detachment.

The citizens are to be congratulated on the freedom from this infectious disease, but everyone can obtain full protection by efficient vaccination with small expense and trouble.

Scarlet Fever.—The type of this disease was mild. Sixty-nine cases were notified, 12 of these being secondary cases and one a “ return ” case. Of the 56 primary cases, 6 were adults, 12 were children under School age, and 38 were School children. Nearly one-half the cases occurred in the first 3 months of the year. In July and August only 2 primary cases were notified in each month and only 3 in September. Fifty-four patients were removed to the City Hospital, being 78 per cent. of those notified.

No death from this disease was registered.

Diphtheria.—This disease, which was so crippling and fatal a disease 30 years ago, has now lost most of its terrors, thanks to prompt diagnosis and intelligent use of the antitoxic serum.

During the year 40 cases were notified, 6 of which were secondary. Of the 34 primary cases, 7 were adults, 7 children

under School age, and 20 children attending School. Thirty-one of the patients were removed to the City Hospital, being 78 per cent. of the cases notified. Two small children under 2 years of age had to undergo tracheotomy and both recovered.

No death from this disease was registered in the City during 1923.

Typhoid and Paratyphoid Fevers.—Three cases of Typhoid and 3 of Paratyphoid were notified. Four of the patients were admitted to the wards of the General Infirmary, sent there by their Medical men, and 3 of these were transferred to the City Hospital as soon as it was safe to do so. Two other patients were treated at the City Hospital. Four of the patients were taken ill during the first five weeks of the year.

No death was registered from this disease.

Acute Poliomyelitis, Acute Polio Encephalitis, Cerebro Spinal Fever.—No case of either of these diseases was notified during the year.

Encephalitis Lethargica.—Two cases were notified, an elderly woman and a girl of 10 years. The former died a month later from other causes. The child was treated at Newtown Hospital and recovered after a long convalescence.

The Public Health (Pneumonia, Malaria, etc.) Regulations, 1918.—Under these Regulations 98 persons were notified as suffering from some form of acute primary Pneumonia.

The following Table gives the grouping in age periods and the deaths in each age group :—

	Age :						Total
	Under 1 year.	1 to 5 yrs.	5 to 25 yrs.	25 to 45 yrs.	45 to 65 yrs.	65 & over	
Acute Primary Pneumonia	12	21	22	10	11	17	93
Deaths ...	3	3	1	1	4	3	15
Influenzal Pneumonia	...	...	2	...	1	2	5
Deaths ...	...	...	...	...	1	...	1

Of the 98 cases, 41 occurred in the first quarter of the year and 24 in the second. In comparison with the year 1922, a very small proportion of the cases were connected with Influenza.

There were only 6 deaths registered from Epidemic Influenza during the year, as compared with 32 in 1922.

Tuberculosis.—There were 102 primary notifications received during the year. Of these 68 were Pulmonary and 34 of other forms of Tuberculosis. In addition to these, 9 persons came to the City suffering from this disease from other districts.

Pulmonary Tuberculosis.—There were 68 cases notified as compared with 92 in 1922 and 93 in 1921. Of these cases no less than 23 died during the year, 15 within 2 months and 5 others within 6 months of notification of the disease.

Of the 68 persons 29 were males (including 7 ex-service men) and 39 were females. The ages of these persons and the deaths that occurred in each age group are set out in the summary on page 26.

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1912.

Summary of Notifications for the year 1923.

Ages.	No. of Notifications on Form " A. "												Total Notifica- tions on Form "A."	No. of Notifications on Form " B. "				Total Notifica- tions on Form " B. "	No. of Notifica- tions on Form " C. "	
	Primary Notifications.													Under 5	5 to 10	10 to 15	Total.		Poor Law Institu- tions.	Sana- toria.
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and up	Total.								
Pulmonary.																				
Males .....	...	...	2	2	6	2	4	5	5	1	2	29	31	...	...	...	...	1	37	
Deaths .....	...	...	...	...	1	...	4	4	2	1	1	13								
Females .....	...	2	1	...	5	6	10	9	2	2	2	39	40	...	...	...	...	...	40	
Deaths .....	...	...	...	...	1	2	2	2	1	1	1	10								
Non-Pulmonary.																				
Males	1	5	5	3	3	1	2	...	...	...	...	20	24	...	...	...	...	...	23	
Deaths	1	1	1	...	...	...	...	...	...	...	...	3								
Females .....	...	5	1	...	1	2	3	...	2	...	...	14	14	...	...	...	...	...	7	
Deaths .....	...	2	...	...	1	...	...	...	...	...	...	3								

NOTE.—The deaths occurred during the year 1923.

As will be seen above nearly one-third of the patients notified died within 6 months of notification. So long as the persons notified have the disease in so advanced a stage when first coming under medical care, the results of sanatorium treatment will look disappointing. It is the insidious onset that puts people off their guard, and the disinclination to go to a doctor for examination just because they feel "out of sorts."

Non-Pulmonary Tuberculosis.—There were 34 persons notified during the year, as follows :—

						Number.	Deaths.
Glands	...	...	...	...	...	15	...
Bones and Joints	...	...	...	...	...	6	...
Spine	...	...	...	...	...	3	...
Abdominal Glands...	...	...	...	...	...	3	...
Meninges of Brain	...	...	...	...	...	6	6
Urinary Organs	...	...	...	...	...	1	...

Of these 34 cases, 23 were notified from the Wards of the General Infirmary and 2 others were admitted there after notification. Following on this surgical treatment, 2 were sent to Oswestry Orthopædic Hospital for special treatment, 1 to Knightwick Sanatorium, and 7 to Newtown Hospital.

The Tuberculosis Dispensary.—Three Clinics a week are held as in previous years, the evening Clinic being for patients who are at work during the day.

The number of persons seen was 282 and they made 905 attendances. Of these, 91 were under 16 years of age. Forty-six persons, 33 being children, who had been in contact

with a tuberculous person in their home, were seen and examined, and in many cases kept under observation for some time. In addition, the Medical men of the City sent 22 persons for examination and report.

The Tuberculosis Nurse is zealous in her endeavours to check the spread of disease in the homes, which under present conditions is by no means an easy task. Outside her official duties the Nurse helps the poor patients in many ways.

The Council last year expended £70 in providing milk, and sometimes eggs, for patients who had been given Sanatorium treatment, to maintain their strength after discharge until they were able to resume work.

RESIDENTIAL TREATMENT.

Knightwick Sanatorium.—The Council retain the use of 8 beds at this Institution, 4 for men and 4 for women. Patients in the early stages of the disease are sent there, so far as can be arranged.

On January 1st, 1923, there were under treatment 3 men and 3 women. During the year 12 males were admitted, 3 being under 16 and one a non-pulmonary case, and 13 females.

Newtown Hospital contains 34 beds, 13 for men, 14 for women, and 7 for children.

The admissions and discharges during the year are as follows :—

	Men.	Boys. under 16.	Women.	Girls. under 16.
In residence on 1st				
Jan., 1923 ...	5	2	7	1
Admitted during the				
year ...	23	11	23	6
	—	—	—	—
	28	13	30	7
Discharged during				
the year ...	14	8	19	5
Died during the	23		24	
year ...	9	...	5	...
	—	—	—	—
In residence on 31st				
Dec., 1923 ...	5	5	6	2
	—	—	—	—

Of the total of 23 males admitted during the year, 9 were Ex-service men, and of these 3 died.

It will be noted that 14 persons died at the Hospital during the year. The removal from their homes of these patients when in their most infectious condition much diminishes the risk of infection in their families.

The Dental Surgeon, Mr. Matley Moore, has treated 11 persons during the year, to their great benefit. In two cases a general anæsthetic was required. In 3 cases dentures were supplied.

Other tuberculous patients had dental treatment from their own dentists.

It is obvious that decaying teeth in a patient's mouth must be a great handicap in the struggle to regain health, but it is not an easy matter to convince the patient of the fact.

The Public Health (Venereal Diseases) Regulations 1916.

The Scheme adopted by the Council for carrying out these Regulations remains as in previous years.

There are Clinics for men and women held on Wednesday and Saturday afternoons at the General Infirmary, and beds are available for such patients as may require in-patient treatment.

The Medical Officer of this Treatment Centre has sent the following information to the Ministry of Health of the work done during the year 1923 :—

	Syphilis.		Gonorrhœa.		Conditions other than Venereal.		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.
Persons under Treatment on Jan. 1st. 1923 ...	43	54	118	15	4	3	165	72
New Patients during 1923	23	22	29	5	20	3	72	30
	66	76	147	20	24	6	237	102
Persons who ceased to attend before comple- tion of treatment ...	22	15	19	8	...	...	41	23
Persons transferred to other Centres ...	2	3	3	1	...	...	5	4
Persons discharged ...	13	6	24	11	...	...	37	17
Under treatment, Jan. 1st, 1924 ...	26	51	98	0	3	2	128	53
Out-patients attendances— By Medical Officer...	292	345	534	56	60	27	986	428
For intermediate treatment ...	...	...	620	93	...	...	620	93
Aggregate number of In-patient days ...	81	222	143	25	15	0	239	247

Of the 45 new patients who came for treatment for Syphilis, 32 were resident in Worcester; of the 34 patients with Gonorrhœa, 20 lived in Worcester.

The total cost of the Treatment Centre during the year was £892. The amount payable by the City was £598, of which the Ministry of Health contributes 75 per cent.

The bacteriological and pathological examinations are made in Birmingham. The specimens sent numbered 120, 100 from the Treatment Centre and 20 from Medical Practitioners. The total cost of this work was £30 6s. od.

The same comments as in previous years may be made concerning the statistics given above. The number of women applying for treatment for Gonorrhœa is very small, only 5 during the whole year. Another serious blot is that one-third of the men and one-fifth of the women who were under treatment for Syphilis ceased to attend before completion of treatment; also 30 per cent. of the men and 40 per cent. of the women suffering from Gonorrhœa acted in the same reckless way. There seems no way of correcting this comparative failure than persuasion by the Medical men who may treat them. There can be no sense of civic duty in the individuals who act so foolishly and so contrary to the welfare of their homes and the community in which they live.

The results of these diseases if not cured are disastrous. The individuals suffer from chronic ill-health, early disablement and premature death, and their families from the results of their illness.

The applications for treatment at the Centre during the last three years do not show any diminution of the incidence of these diseases.

New cases coming to Centre from the City :—

						Syphilis.	Gonorrhœa.
1921	...	...	...	...	...	22	22
1922	...	...	...	...	...	22	16
1923	...	...	...	...	...	32	20

From the point of view of prevention of the spread of the disease these figures are not promising.

It must be remembered that very little progaganda work has been carried on in Worcester during the last five years. If these diseases are to be brought under better control, more advertising of the baneful effects of the diseases must be carried on. Means also should be found of treating the women who under present arrangements will not attend the Centre at the General Infirmary. It must be remembered that many of these are innocent victims.

Maternity and Child Welfare.

BY DR. MARION B. ANDREWS.

Staff.

MISS WOOD	...	Superintendent, and Health Visitor in charge of the Central District.
MISS DIGBY	...	Health Visitor in charge of the South District.
MISS MOORE	...	Health Visitor in charge of the North District.
MISS STEEL	...	Health Visitor in charge of the West District.
CLERKS	... ..	Miss Bale (full-time), Miss Stevenson (half-time).

Offices and Centre : 54, Lowesmoor.

The working arrangements detailed in my last year's report have now stood the test of a full year's trial, and have proved satisfactory, so that I have nothing to add to that report under the headings of Staff, Scheme of Work, and Premises.

A system of record keeping has been introduced which enables accurate statistics to be readily available at any time, without involving any more clerical work. The main figures have, for the first time, been summarised in a series of Tables appended to this Report. The absence of such systematic records in the past makes it difficult to estimate progress by comparison, but as far as this can be done it shows that the work has in all its branches been kept well up to its former level, while in certain departments, more especially in the

supply of Home Helps, in the provision of dinners, in the dental work, and in the number of women and children seen by the Medical Officer, there has been a considerable increase as compared with 1922.

That this can be recorded in spite of the fact that I have only the equivalent of four sessions weekly to give to this Department—the rest of my time being occupied with the School Medical Service—speaks volumes for the devoted work of the Staff, of whose unflagging energy in preaching and enforcing the gospel of health in the homes of our City, and to the mothers who attend the Centres, and in supervising such assistance in the upbringing of their children as we are permitted to supply, I cannot speak too highly. It is a daily hand to hand fight with ignorance and poverty, and the measure of the enthusiasm with which it is fought is, I think, to be found in the Infant Mortality index figure, which is the lowest yet recorded, i.e., 57 per 1,000 births.

In order to give coherence to my Report, I last year adopted Sir George Newman's classification of the various activities which should be included in any complete arrangements for Maternity and Child Welfare work, and recorded our work—or absence of work—under each of his headings. I shall follow the same plan this year.

A. MATERNITY WORK.

(1) *Ante-natal Care, and Nutrition of the Mother.*—The arrangements as described last year are still in force. No special ante-natal Clinic is held, but the ante-natal cases are seen at the same Clinics as the children, which often saves the mother's time, as she can bring a baby or toddler for examination at the same visit.

Milk and dinners have again been provided in necessitous cases both to pregnant and nursing women, but milk only when there was some reason which made it impracticable to give dinners, such as the too great distance of the home from the Centre, or some condition of health for which milk was more suitable. This was done because it is probable that a substantial hot meal daily is of more nutritional value than a pint of milk to an adult, is less liable to be diverted from its destined end, and also preserves the milk supply as far as possible for bottle fed babies.

This has led to a considerable increase in the number of dinners, 6,508 against 4,107 in 1922, but owing to the kindness of the Infant Health Society in reducing the price of the dinners to us paripassu with the increase in the number required, the total cost has been a little less, £236 17s. 8d. against £253 8s. 9d. in 1922. The decrease in price has not meant any diminution in the quantity or quality of the meals served, which consist of a large plateful of meat, potatoes and vegetables, followed by a milk or suet pudding. For the organisation of these meals our most grateful thanks are due to Mrs. Duncan, and for bearing the entire cost for some women not eligible under our regulations, to the Infant Health Society. In all 112 women received dinners for an average period of ten or eleven weeks each, the average number receiving them at any one time being 21, against 14 for last year.

The Dental Clinic treated 34 women and 11 children. Of the women ten cases had extractions under general anæsthesia, the anæsthetic being in each case administered by the woman's own doctor. Of these 10 cases, 8 were on the free scale, but the other 2 were on the half scale only. One of these paid

10/6, the other being very kindly paid for by the Infant Health Society, owing to special conditions. Dentures were provided for three women whose teeth had been extracted the previous year, the sum of £7 2s. 6d. being recovered towards the cost of £9 os. od. for materials. The ruling that every woman shall pay £3 towards the cost of dentures has proved a very serious obstacle to our poor mothers. Several of them are bringing in small sums weekly, but the fact that out of the ten cases who have had all or most of their teeth extracted, eight were on the free scale, i.e., the family income did not exceed 6/- per head weekly, speaks for itself. With 6/- a head to provide food, clothing and firing for a week the prospect of saving 60/- in reasonable time is extremely remote.

The Class for Mothers is dealt with under heading No. 3 this year.

We have again to thank the Infant Health Society for the provision of surgical belts and bandages in several cases.

(2) *Medical and Midwifery Services for Childbirth.*—The midwifery service continues on the whole extremely satisfactory. There have been no cases of Puerperal Fever and only five of Ophthalmia Neonatorum. The unfortunate feature is still the number of children who die before the midwife has ceased attending. Of the total 53 deaths, 20 occurred before the tenth day, and another 5 before the fourteenth. So that practically half our death-rate takes place during the first fortnight of life. Of these 25 cases, in no less than 20 was the cause of death given as "prematurity." Very little instruction seems to be given to the mothers as to the need for extra warmth for these children, while the custom seems to be to wash them and feed them as if they

were normal children. Knowing what can be done by modern enlightened methods to keep such children alive and cause them to grow up healthy and strong, the lack of this care is greatly to be deplored. We have endeavoured to meet one difficulty by stocking olive oil at the Centre, to be sold at cost price, or less in needy cases, and several midwives have already shown their appreciation of this by sending at once for a supply and for an order for cotton wool, for use directly a premature child is born.

Claims from doctors for payment of fees under the Midwives' Act, 1918, were received in 102 cases, while 48 Midwives also sent their accounts to us on account of the poverty of the patient.

In 11 cases the patients eventually paid the doctors themselves and the claims were withdrawn, while in 5 cases the midwives' claims were disallowed. This left 91 doctors' claims for a sum of £150 10s. 6d., and 43 midwives' claims for a sum of £42 15s. 6d., or a total of 134 claims for £193 6s. 0d. After consideration of the circumstances by the M. and C.W. Sub-Committee it was decided not to demand any repayment at all in the case of 46 doctors' and 41 midwives' claims, while part of the repayment was remitted in a number of other cases, 47 patients being left in the end to pay £51 4s. 6d. Of these—

	£	s.	d.
14 completed payment, accounting for ...	15	14	6
11 are still paying, having paid up... ..	6	18	9
12 paid	2	11	0
and were then handed over to the City			
Accountant to recover the balance of	13	7	0
leaving to be recovered	12	13	3
10 dealt with in November have not yet			
begun to pay			
<hr/> Total 47 <hr/>	<hr/> £51	4	6 <hr/>

Of the 9 cases left outstanding at the end of 1922, one has completed payment, and the other 8 have been handed over to the City Accountant.

(3) *Domestic Aid at the Time of Childbirth*.—I have nothing to add to what I said on this subject last year. I then expressed the opinion that this most useful and valuable feature of our work should be increased, “doubled or even quadrupled with advantage.” It has not been quadrupled this year, but it has been more than doubled, Home Helps having been supplied in 54 cases at a cost of £39 16s. 6d., against 23 at a cost of £13 19s. 0d. We have in fact returned to the figures for 1921 (52 at a cost of £42), which seems to me the minimum if this feature is to be of real practical use.

(4) *Maternity Home and Hospital Accommodation* and (5) *Homes for Unmarried Mothers*.—No provision yet exists for either of these, other than the Infirmary for the first, and Rescue Homes for the second.

Of the 32 cases of still-births notified I had seen seven of the mothers previously at my Clinic, and in five of these seven the still-birth might have been prevented had hospital accommodation and treatment of a suitable nature been available. In one case we believe a still-birth was prevented by the provision of a Home Help for a number of weeks, so that the mother might remain in bed, where she eventually had a living child, but in these five cases although every help we could give was given, more was required than it was possible to provide in the patient's own home.

INFANT WELFARE.

(6) *Notification of Births and Still-births*.—These are all visited on the eleventh day, except where a doctor is in

attendance. The midwives also send early information to the Centre of cases in need of milk or dinners or other help, even sometimes on the first day. These requests are always immediately complied with, the usual investigation into the family circumstances being postponed until the Health Visitor takes over the case on the midwife ceasing to attend. Our relations with the midwives are thoroughly satisfactory, and the advantage to the work of a cordial understanding between midwives and Health Visitors is too evident to need comment.

Of the 949 live births and 32 still-births notified—

Midwives notified 835 live births and 29 still-births.

Medical Men „ 34 „ „ „ I „

Maternity

Nurses „ 37 „ „ „ I „

Parents „ 22 „ „ „ 0 „

Master of

Workhouse „ 14 „ „ „ 0 „

House Surgeon

at Infirmary „ 7 „ „ „ I „

The problem of the prevention of still-birth is closely associated with that of the deaths from prematurity, as the causes of still-birth and premature birth are largely, though not altogether, the same, and the best way of preventing death from prematurity would be to prevent premature birth.

At the same time it is scarcely too much to say that no child need die from prematurity alone, and yet this is given as the *sole* cause of death in 18 cases. Broncho-pneumonia is the next great enemy to life, accounting for 12 of the deaths under one year. It should be as conquerable as infective enteritis, which used to take such a large toll, and this year

accounted for only two cases, gastro-enteritis accounting for four more. Of these latter the mother in one case had been warned and reasoned with, as to her methods of feeding, having already lost her only other child in the same way, but without avail, and the child, a perfectly healthy one at birth, finally succumbed at 11 months old.

(7) *Home Visiting*.—This has been carried out with the same thoroughness and regularity as heretofore. It forms the backbone of the work. Each Health Visitor is welcomed in her district as a friend. Her visits are now rarely refused. On the contrary, when she is known to be in a street she is called in to house after house, and consulted on many matters other than those directly concerned with health. In this way the Health Visitors practically keep in touch with all our poorer population, know all about the babies and children, and are the first to hear of the occurrence of illness. In this way also they are in a position to know at once if help is being used wrongly, or has ceased to be needed, probably a better practical safeguard against misuse than the enquiry forms which have to be filled up, with particulars as to family circumstances, by all parents applying for help.

(8) *Infant Welfare Centres*.—The arrangement of these, described in detail in last year's Report, has been continued. Briefly re-stated, there is a Weighing Clinic for each of the four districts, held by the Health Visitor for that district once a week, attended by infants, toddlers and mothers, and a Medical Clinic for each district, held by the Medical Officer assisted by the Health Visitor for the district, once a fortnight. The statistics of attendances are given in Tables II. and III. The Medical Clinics, and the Weighing Clinics for North, South and Central districts are held at 54, Lowesmoor; the

Weighing Clinic for the West was held up till Easter, as formerly, in St. Clement's Parish Room, and for the rest of the year at the Municipal Dairy in Broad Street. The change was made because St. Clement's Parish Room, though most suitable in itself, was very much out of the way for any mothers except those living in the immediate vicinity. This restricted the attendances most unsatisfactorily, and a very great improvement was observed directly the change was made.

Class for Mothers.—The numbers in attendance had increased so greatly by the beginning of the year that it was found necessary to seek a larger room than was available at 54, Lowesmoor. A move was therefore made to the Municipal Dairy. But as the attendance still increased, a further change was made necessary, and the Class was divided into two, and moved back to 54, Lowesmoor, the mothers from the West and South attending on Thursday afternoons, those from the North and Central districts on Friday afternoons, each Class being managed by the Health Visitors for the respective districts.

In all 79 women were enrolled in the Classes, and these made a total of 1,675 attendances. As 57 meetings were held during the year this gives an average attendance of 29, but this average would have been considerably larger had not the attendance at the newly formed Thursday Class been naturally small at first.

The Thrift Club has now a membership of 44, making regular weekly payments. To meet the bonus given on all savings, the Health Visitors have collected garments, new and otherwise, which have been sold to members of the

Classes for small sums. Sufficient money was made in this way not only to pay the bonus, but to provide—with the help of a few voluntary subscriptions—a tea and treat in February. In September, 50 of the mothers spent a day at Cheltenham, having themselves saved up the money for their railway fares and to provide their own lunches, tea being given by the aid of friendly subscriptions.

The experiment has been tried of setting simple examination papers on the mothercraft subjects which had been taught. At first very few mothers attempted to answer these, but very soon nearly all were induced to try, and many of the answers were very well written. We hope next year to have a regular quarterly competition with small prizes for the best papers.

Of the value of this systematic definite instruction it is impossible to speak too highly, and it is extremely gratifying frequently to find mothers applying the knowledge they have gained in this way. The majority of our women undoubtedly are beginning to realise their ignorance of many things connected with health, and are eager and willing to learn. It is one of the most cheering results of our work, and of the happiest augury for the future, and my only regret is that in the time at my disposal it is quite impossible for me to take a share in giving this definite teaching.

Massage Clinic.—Mrs. Duncan has again most generously given of her time and labour to this work. Ten cases have been treated during the year, six for various muscular debilities and mal-nutritions causing backwardness in walking, lateral curvatures, &c., and four for definite paralyses, all with the approval of their own doctors. All have improved

extraordinarily, six being discharged cured. In all, these children made 255 attendances, from which an estimate of the work voluntarily undertaken and carried through by Mrs. Duncan can perhaps, by those who know anything of massage, be made. Mere thanks are inadequate, but perhaps the results attained are the best form of thanks.

(9) *Infant Treatment Centres, Observation Wards and Hospitals*, and (10) *Day Nurseries: Homes for Healthy Babies*.—Our work for children is still handicapped by the absence of any facilities under these headings. There is a Children's Ward in the Infirmary, but no special out-patient department.

In spite of these difficulties however the Child Welfare work is still carried on strictly on preventive lines, every effort being made to place sick women and children under the care of a doctor, either privately, at the Dispensary, or at the Infirmary. Virol, Cod Liver Oil and Olive Oil are obtainable at the Centre, but no drugs of any sort. An occasional prescription is given for Parrish's Chemical Food, or a simple ointment or mouth wash, or some such everyday medicament as most people would buy for themselves without consulting a doctor, but even this is avoided as far as possible. And, as far as possible, where a doctor is known to be in charge of a case, his wishes are consulted in every way as to the kind of milk food, for example, the baby is to be granted, whether it is to have Virol or Cod Liver Oil and so on, and everything possible is done to help the mother to carry out his instructions.

In conclusion, we have again to thank Canon and Mrs. Wilson and the Infant Health Society for continual help and support in every possible way—provision of expensive surgical

appliances, railway fares where cases have had to go over to Birmingham for treatment, dinners and milk for cases where official regulations did not permit and where hardship would have resulted, help with dental fees, gifts of clothing and furniture, Hospital and Dispensary letters : these are only some of the things for which we have turned to them and which have been instantly granted.

But above all this year we have been deeply indebted for the special help given for cases of pneumonia. Now that enteritis has been practically conquered, pneumonia and broncho-pneumonia are the chief enemies of infant and child life, and the cause of much ill-health at a later age. Recognition of this was at once practically met by a grant of money from the Infant Health Society to initiate a campaign against these diseases. This money has been chiefly used so far, to provide milk in sufficient quantities for the sufferers—up to a quart or more a day if necessary—and also coal, so that a constant temperature might be obtained in the bedroom. Other necessities such as brandy, bovril, cotton wool, have also been provided in whatever quantities the doctors required. Milk and cod liver oil have been continued during convalescence until health was re-established. It is too early to speak of results yet. Probably they will not be manifest for several years to come. The figures given briefly are :—Thirty-three cases dealt with during the year under the scheme, fourteen under one year of age, with two deaths over and four deaths under one year. Of the thirty-three cases, fifteen occurred in children who were apparently healthy, eighteen in children suffering from rickets or some form of mal-nutrition. Two of the healthy ones succumbed, four of the delicate ones. There is much work and observation needed, and much teaching of mothers, before the pneumonia enemy can be conquered. The financial part having been guaranteed in

this generous way, it is unfortunate that the extremely limited time of a part-time officer prevents full advantage being taken of the opportunity to grapple with the problem.

We have also to thank Sir Arthur and Lady Carlton for many kindnesses, especially for a treat to some 700 mothers at the theatre, and for many Hospital letters; Mrs. Edwards for gifts of fruit and clothes; Mrs. Thomas for special donations; Mrs. Duncan for organising the dinners, for giving massage, and for providing so promptly the Hospital letters and other benefits granted by the Infant Health Society; Mrs. Cole, Miss Glenney, Miss Hyde, Miss Jacomb, Miss Zoe James, Mrs. Powell, Mrs. A. Spreckley and Miss Hesketh Williams for assistance again given so regularly and kindly at the various Centres and Clinics.

TABLE I.

MATERNITY AND CHILD WELFARE.

Visits paid to Homes by the Health Visitors.

A.	First.	Return.	Total.
To Infants under one year ...	806	3,673	4,479
To Children one to five years	—	—	6,281
To Expectant Mothers ...	274	395	669
To Mothers after confinement	—	—	99
	—	—	—
Total ...	1,080	4,068	11,528
	—	—	—

B.						Visits.
To cases of	Ophthalmia Neonatorum	...	...	...	...	25
„ „ „	Puerperal Fever	...	...	...	...	—
„ „ „	Measles and German Measles	...	...	...	...	66
„ „ „	Whooping Cough	...	...	...	...	30
„ „ „	Epidemic Diarrhoea	...	...	...	...	4
„ „ „	Polio-myelitis	...	...	...	...	—
Total						125

C.						
In connection with—						
Infant Deaths	...	...	...	...	...	10
Still-Births	...	...	...	...	...	38
Midwifery Fees	...	...	...	...	...	205
Dental Cases	...	...	...	...	...	35
Other Cases	...	...	...	...	...	1,828
Total						2,116

D.						
Total Visits paid on District.						
Group A	...	...	...	...	...	11,528
„ B	...	...	...	...	...	125
„ C	...	...	...	...	...	2,116
Total						13,769

TABLE II.

CLINICS HELD BY M. & C. W. MEDICAL OFFICER.

	South.	North.	West.	Central.	Total.
1. Number of Meetings ...	21	22	21	22	86
2. Attendances.					
Infants under 1 year :					
First Visits ...	71	88	68	54	281
Return ,, ...	54	67	69	61	251
Total ,, ...	125	155	137	115	532
Children 1 to 5 years :					
First Visits ...	43	39	45	40	167
Return ,, ...	59	54	57	45	215
Total ,, ...	102	93	102	85	382
Ante-natal Women :					
First Visits ...	35	46	31	57	169
Return ,, ...	24	31	25	33	113
Total ,, ...	59	77	56	90	282
Post-natal Women :					
First Visits ...	10	5	10	10	35
Return ,, ...	17	25	20	27	89
Total ,, ...	27	30	30	37	124
Special Women :					
First Visits ...	12	13	11	10	46
Return ,, ...	8	11	6	7	32
Total ,, ...	20	24	17	17	78

				South.	North.	West.	Central.	Total.
3. Number who made more than one visit :								
Infants under 1 year...				21	32	35	25	113
Children, 1 to 5 years...				27	20	28	21	96
Ante-natal Women ...				13	17	18	27	75
Post-natal Women ...				11	15	13	14	53
4. Average attendance per session :								
Children	...	...		10.8	11.2	11.3	9.1	10.6
Women	...	...		5.0	6.0	5.0	6.5	5.6
Total	...			15.8	17.2	16.3	15.6	16.2

TABLE III.

MATERNITY AND CHILD WELFARE WEIGHING CENTRES.

	North.	Central.	South.	West.	Total.
1. Number of Meetings ...	49	46	47	47	189
2. Total Visits :					
Infants under 1 year...	712	772	390	276	2,150
Children 1 to 5 years ...	482	472	211	254	1,419
Total Children ...	1,194	1,244	601	530	3,569
Expectant Mothers ...	42	84	0	7	133
Other Women ...	112	212	74	59	457
Total Women ...	154	296	74	66	590
3. Average attendance per Session :					
Children ...	24	27	12	11	18
Women ...	3	6	1·6	1·4	3
Total ...	27	33	13·6	12·4	21
4. First Visits :					
Children ...	106	135	96	36	373
Expectant Mothers ...	31	37	—	6	74
Total ...	137	172	96	42	447

Incidence of the Diseases that occur among Women and Young Children.

1. **Puerperal Fever.**—No case of this disease was notified during the year. From the Tables in a Report on Maternal Mortality by Dr. Janet M. Campbell of the Ministry of Health recently issued, it appears that Worcester has had during the years 1919-1922 only .51 deaths from "Puerperal Fever" per 1,000 births and is placed lowest of all the County Boroughs. This is highly creditable to the Midwives of the City, and proves the care and skill exercised in their work.

The Report points out the great variation of ratio of deaths to notified Puerperal cases in the towns, and says this must be due to incomplete notification in some of them. It is very unlikely that cases in Worcester are not notified and for this reason, that 806 visits were paid by the Health Visitors to newly born babies out of a total of 931 births, and information of mild cases of Puerperal Fever would have been obtained and reported by them.

Two deaths of women occurred in connection with their confinements, one from Placenta Pravaria and one from Pulmonary Embolism.

2. **Ophthalmia Neonatorum.**—Six cases were notified. Five of the cases recovered without any damage to the eyesight, but in one child the vision of one eye will be impaired.

3. **Measles and Rubella.**—There was a considerable epidemic of Measles in the early summer, and 6 deaths were registered from this disease. The epidemic did not necessitate the closing of any of the Elementary Schools.

4. **Whooping Cough.**—This disease was also unduly prevalent and 4 deaths occurred, 2 of the children dying were under one year of age and 2 between the ages of 1 and 5 years.

5. **Epidemic Enteritis.**—Four deaths were registered under this heading and 5 from Enteritis. Five were in infants under 1 year of age and 4 between the ages of 1 and 5 years. Three occurred in the first quarter of the year, 4 in the third, and 2 in the fourth quarter of the year.

The arrangement continues by which the District Nurses of the City and County Nursing Institution visit cases of the above diseases under the directions of the patient's doctor.

Sanitary Administration.

Staff.—The Staff of the Health Department remains as during 1922. The School Medical Officer, Dr. Marion B. Andrews, gives four-elevenths of her time to the work relating to Maternity and Child Welfare, which is carried out at 54, Lowesmoor. The rest of the work of the Department, including that of the Tuberculosis Dispensary and visiting the City Hospital, is in the hands of your Medical Officer.

The Chemical and Bacteriological Examinations are made at the Laboratory at the Shirehall as in past years. It is a great advantage for the work to be carried on locally, as the results can be known in the shortest time consistent with the character of the work to be done.

Swabs from the throat or nose were taken from 170 persons suspected to have Diphtheria by the Medical Practitioners. From these, B. Diphtheria were cultivated in 34 cases and not cultivated in 136. In addition, 148 swabs were sent from the City Hospital.

Specimens of sputum examined numbered 227. 163 of these were sent by the Medical Practitioners, of which number microscopical examination detected Tubercle Bacilli in 29 cases and in 134 the bacilli could not be found. The total cost of these examinations was £50 14s. od.

It is very desirable that every kind of scientific help should be made use of for the detection of disease. But after all the main reliance must be the diagnostic skill of the medical man. For instance, in cases of early Tuberculosis the absence of the Tubercle Bacillus from the sputum is no denial of the disease being present, but to wait until it is detected is giving the patient a poor chance of being cured.

Housing.

The Health Committee has visited various blocks of houses during the year. Under present conditions it is out of the question making Closing Orders, as tenants cannot be evicted, there being no alternative accommodation. Many cases of gross overcrowding were brought before the Committee, but the law could not be put into action.

The shortage of houses is getting worse year by year. The City Surveyor informs me that for the 5 years 1909-1914 an average of 60 houses a year were erected.

The following is the record for the 7 years 1917 to 1923 inclusive :—

	1917	1918	1919	1920	1921	1922	1923
Total houses erected ...	0	1	7	20	47	115	24
By the Council ...	0	0	0	0	38	111	0

The total houses erected in 7 years was 214, a yearly average of 30.

The Registrar General's revised figures for the Census taken in June, 1921, gave a population of 49,160. The population in June, 1923, was 49,860, an increase of 700 in two years. The inmates of each house average 4.17, so that this increase of 700 persons would require 167 new houses.

It is obvious that the building of many more houses is an urgent necessity.

The following Statistics are asked for by the Ministry of Health :—

Number of new houses erected during the year :—

(a) Total	...	...	...	...	...	24
(b) As part of a municipal housing scheme...						0

1. Unfit Dwelling Houses.

Inspection—

(1) Total number of dwelling houses in inspected for housing defects (under Public Health or Housing Acts)	...	1,226
(2) Number of dwelling-houses which were inspected and recorded under the Housing (Inspection of District) Regu- lations, 1910	... ..	453

(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	...	...	...	...	...	81
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-heading) found not to be in all respects reasonable fit for human habitation	...	...	...	...	...	707
2. Remedy of defects without service of Formal Notices.						
Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers	...	...	...	...	...	468
3. Action under Statutory powers.						
A. Proceedings under Section 28 of the Housing, Town Planning, &c., Act, 1919	...	...	...	...	...	None
(1) Number of dwelling-houses in respect of which notices were served requiring repairs	...	...	...	...	...	„
(2) Number of dwelling-houses which were rendered fit :—						
(a) By Owners—work now being done	...	...	...	...	...	„
(b) By Local Authority in default of owners	...	...	...	...	...	„
(3) Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close	...	...	...	...	...	„

B. Proceedings under Public Health Acts :—

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied...	...	...	238
(2) Number of dwelling-houses in which defects were remedied :—			
(a) By Owners	...	...	178
(b) By Local Authority in default of owners	...	...	Nil.

C. Proceedings under Sections 17 and 18 of Housing, Town Planning, &c., Act, 1909:—

(1) Number of representations made with a view to the making of Closing Orders	None
(2) No. of dwelling-houses in respect of which Closing Orders were made	...
(3) No. of dwelling-houses in respect of which Closing Orders were determined, the dwelling-houses having been rendered fit	...
(4) No. of dwelling-houses in respect of which Demolition Orders were made	...
(5) No. of dwelling-houses demolished in pursuance of Demolition Orders	...

Unhealthy Areas.—Two small areas were represented as Unhealthy Areas to the Health Committee on July 4th. These areas had been visited by an Inspector from the Ministry of Health on June 26th, and he advised that they should be dealt with as Unhealthy Areas.

The Tybridge Street area comprised 28 houses, 4 of which were void. These houses contained 128 persons, 85 adults and 43 children.

The Dolday area contained 53 houses, 49 occupied and 4 void. These houses contained 244 persons, 147 adults and 97 children.

Schemes dealing with these areas have been prepared and submitted to the Health Committee. The schemes have been considered and forwarded to the Ministry of Health for their consideration.

It is obvious that nothing can be done as regards these areas until houses have been erected to accommodate the persons now living in them. This will require the erection of about 80 houses suitable for occupation by the poorest paid section of our population.

“The Castle,” Worcester.—In October, 1923, the Female Block of His Majesty's Prison, Castle Street, Worcester, was taken over by the Council for housing purposes, and this part of the Prison is now known as “The Castle.”

An advertisement in the local newspaper resulted in 170 applications for accommodation being received, and considerable difficulty was experienced in choosing the most deserving cases, as provision for 16 families only could be given.

The East Tower, which was formerly occupied by the Ministry of Pensions, has also been taken over by the Council, and is occupied by 2 families, both of which were previously badly overcrowded.

In all, therefore, 18 families are now occupying rooms at "The Castle," the total number of occupants being 54 adults and 56 children.

The rents payable by the tenants vary from 4/6 to 7/6 per week, which includes rates and gas for lighting and heating of corridors and cells.

The accommodation provided for each tenant consists of one good living room and a sufficient number of cells for bedrooms for the families concerned. Water supply and sinks are convenient, and a large Laundry provides ample facilities for washing purposes. Gas stoves on the slot principle have been provided for cooking purposes.

TABLE I. VITAL STATISTICS OF WHOLE DISTRICT DURING 1923 AND TEN PREVIOUS YEARS.

Year.	Popu- lation estimated to middle of each year.	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS		NETT DEATHS BELONGING TO THE DISTRICT.			
		Un- corrected Number.	Nett.		Number	Rate.	of Non- Residents regis- tered in the District.	of Residents not regis- tered in the District.	Under 1 Year of Age.		At all Ages.	
			Number	Rate.					Number	Rate per 1000 nett births		
I	2	3	4	5	6	7	8	9	10	11	12	13
1913	48,287	930	930	19.25	711	14.72	54	29	83	89	686	14.2
1914	48,424	994	1000	20.6	732	15.11	28	24	88	88	728	15.03
1915	48,071	995	1000	20.16	699	14.09	30	31	83	83	700	14.11
1916	48,459	878	882	18.2	654	13.5	44	33	69	78.2	643	13.3
1917	49,000	771	773	15.7	692	14.1	69	54	50	64	677	13.8
1918	49,000	792	800	16.3	783	16.0	64	66	48	60	785	16.0
1919	49,000	817	815	16.6	670	13.6	62	38	50	61	646	13.1
1920	49,248	1141	1142	23.2	679	13.8	57	19	77	67	641	13.01
1921	49,160	989	993	20.1	643	13.1	65	26	60	60.4	604	12.3
1922	49,240	970	975	19.8	715	14.5	70	20	65	67	665	13.5
1923	49,860	934	931	18.5	593	11.9	68	23	53	57	548	10.9

TABLE II.

INFANT MORTALITY 1923. NETT DEATHS FROM STATED
CAUSES AT VARIOUS AGES UNDER ONE YEAR OF AGE.

CAUSE OF DEATH.	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-3 Months.	3-6 Months.	6-9 Months.	9-12 Months.	Total Deaths under One Year.
Small-pox ... ..	..	..	..	..	..	..	..	..	..	..
Chicken-pox ... ..	..	..	..	..	..	..	..	..	..	..
Measles ... ..	..	..	..	..	..	..	..	..	..	..
Scarlet Fever ... ..	..	..	..	..	..	..	..	..	..	..
Whooping Cough ... ..	..	..	..	..	..	..	..	1	1	2
Diphtheria and Croup ... ..	..	..	..	..	..	..	..	..	..	..
Influenza ... ..	..	..	..	..	..	..	..	..	..	..
Tuberculous Meningitis ... ..	..	..	..	..	..	..	..	..	1	1
Abdominal Tuberculosis ... ..	..	..	..	..	..	..	..	..	..	..
Other Tuberculous Diseases ... ..	..	..	..	..	..	..	..	..	..	..
Meningitis (<i>not Tuberculous</i>) ... ..	..	..	..	..	..	..	..	..	..	..
Convulsions ... ..	..	1	..	..	1	..	..	..	..	1
Laryngitis ... ..	..	..	..	..	..	..	..	..	..	..
Bronchitis ... ..	..	..	..	..	..	..	1	2	..	3
Pneumonia (all forms) ... ..	..	..	1	..	1	1	2	2	1	7
Diarrhœa ... ..	..	..	..	..	..	..	..	..	..	..
Enteritis (including Colitis) ... ..	..	..	..	2	2	1	1	2	1	7
Gastritis ... ..	..	..	..	..	..	..	..	..	..	..
Syphilis ... ..	..	1	..	..	1	2	..	..	..	3
Rickets ... ..	..	..	..	..	..	..	..	..	..	..
Suffocation, overlying ... ..	..	..	..	..	..	..	..	..	..	..
Injury at Birth	2	..	..	..	2	..	..	..	..	2
Atelectasis	1	..	..	..	1	..	..	..	..	1
Congenital Malformations	2	..	..	..	2	..	1	..	..	3
Premature Birth	12	3	2	..	17	2	..	..	..	19
Atrophy, Debility, and Marasmus ... ..	..	..	..	..	..	1	..	..	..	1
Inanition	1	..	..	..	1	..	..	..	..	1
Other Causes ... ..	..	..	..	..	..	..	..	..	2	2
	18	5	3	2	28	7	5	7	6	53

Nett Births registered in the year { legitimate 895.
illegitimate 36.

Nett Deaths in the year { legitimate infants 49.
illegitimate infants 4.



DEATHS REGISTERED FROM ALL CAUSES
DURING THE YEAR 1923.

NOTE.—The Deaths of Non-Residents occurring in Public Institutions situated in the District are excluded, and the Deaths of Residents occurring in Public Institutions situated beyond the limits of the District are included.

No.	Diseases.	Ages.												All Ages
		0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85		85 and over.
1	Small-pox. (a) Vaccinated .....	...	...	...	...	...	...	...	...	...	...	...	...	...
	(b) Unvaccinated .....	...	...	...	...	...	...	...	...	...	...	...	...	...
	(c) No Statement .....	...	...	...	...	...	...	...	...	...	...	...	...	...
2	Measles .....	...	5	...	1	...	...	...	...	...	...	...	...	...
3	Whooping Cough.....	2	2	...	...	...	...	...	...	...	...	...	...	...
4	Scarlet Fever .....	...	...	...	...	...	...	...	...	...	...	...	...	...
5	Diphtheria .....	...	...	...	...	...	...	...	...	...	...	...	...	...
6	Enteric Fever .....	...	...	...	...	...	...	...	...	...	...	...	...	...
7	Paratyphoid Fever .....	...	...	...	...	...	...	...	...	...	...	...	...	...
8	Typhus Fever .....	...	...	...	...	...	...	...	...	...	...	...	...	...
9	Epidemic Influenza.....	...	...	...	1	...	...	...	...	...	3	...	2	6
10	Diarrhoea, Dysentery .....	...	...	...	...	...	...	...	...	...	...	...	...	...
11	Epidemic Enteritis	1	3	...	...	...	...	...	...	...	...	...	...	...
12	Asiatic Cholera .....	...	...	...	...	...	...	...	...	...	...	...	...	...
	Other Allied Diseases .....	...	...	...	...	...	...	...	...	...	...	...	...	...
13	Puerperal Fever .....	...	...	...	...	...	...	...	...	...	...	...	...	...
14	Erysipelas.....	...	...	...	...	...	...	...	...	...	...	...	...	...
15	Pyæmia.....	...	...	...	...	...	...	1	...	...	...	...	...	...
16	Infective Endocarditis .....	...	...	...	...	...	...	...	...	...	...	...	...	...
17	Hydrophobia .....	...	...	...	...	...	...	...	...	...	...	...	...	...
18	Glanders .....	...	...	...	...	...	...	...	...	...	...	...	...	...
19	Anthrax .....	...	...	...	...	...	...	...	...	...	...	...	...	...
20	Tetanus.....	...	...	...	...	...	...	...	...	...	...	...	...	...
21	Cowpox .....	...	...	...	...	...	...	...	...	...	...	...	...	...
22	Syphilis	3	...	...	...	...	...	...	...	...	...	...	...	...
23	Gonorrhœa .....	...	...	...	...	...	...	...	...	...	...	...	...	...
24	Phagedæna .....	...	...	...	...	...	...	...	...	...	...	...	...	...
25	Other Allied Diseases .....	...	...	...	...	...	...	...	...	...	...	...	...	...
26	Malarial Fever .....	...	...	...	...	...	...	...	...	...	...	...	...	...
27	Rheumatic Fever .....	...	...	...	...	...	...	...	...	...	...	...	...	...
28	Rheumatism .....	...	...	...	...	...	...	...	...	...	...	...	...	...
29	Tuberculosis of Brain	1	3	1	1	1	...	...	...	...	...	...	...	...
30	Tuberculosis of Larynx .....	...	...	...	...	...	...	...	...	...	...	...	...	...
31	Tuberculosis of Lungs .....	...	...	...	1	7	4	13	9	6	5	1	...	...
32	Tuberculosis of Abdomen .....	...	...	...	...	...	...	...	...	...	...	...	...	...
33	Tuberculosis of Bones and Joints.....	...	...	...	...	1	...	...	...	...	...	...	...	...
34	General Tuberculosis .....	...	...	...	...	...	...	...	...	...	...	...	...	...
35	Other Infective Diseases .....	...	...	...	...	...	...	...	...	...	...	...	...	...
36	Thrush .....	...	...	...	...	...	...	...	...	...	...	...	...	...
37	Actinomycosis .....	...	...	...	...	...	...	...	...	...	...	...	...	...
38	Hydatid Diseases .....	...	...	...	...	...	...	...	...	...	...	...	...	...
39	Scurvy .....	...	...	...	...	...	...	...	...	...	...	...	...	...
40	Diseases due to Altered Food.....	...	...	...	...	...	...	...	...	...	...	...	...	...
41	Acute Alcoholism .....	...	...	...	...	...	...	...	...	...	...	...	...	...
42	Chronic Alcoholism .....	...	...	...	...	...	...	...	1	...	...	...	...	...
43	Chronic Industrial Poisonings .....	...	...	...	...	...	...	...	...	...	...	...	...	...
44	Other Chronic Poisonings .....	...	...	...	...	...	...	...	...	...	...	...	...	...
45	Osteo-arthritis .....	...	...	...	...	...	...	...	...	...	...	...	...	...
46	Gout .....	...	...	...	...	...	...	...	...	...	...	...	...	...
47	Cancer .....	...	...	...	...	...	...	...	10	15	19	9	...	...
48	Diabetes Mellitus .....	...	1	...	1	...	...	...	...	...	...	...	...	...
49	Purpura Hæmorrhagica .....	...	...	...	...	...	...	...	...	...	...	...	...	...
50	Hæmophilia .....	...	...	...	...	...	...	...	...	...	...	...	...	...
51	Anæmia .....	...	...	...	...	1	...	...	...	...	...	...	...	...
52	Lymphadenoma .....	...	...	...	...	...	...	...	...	...	...	...	...	...
53	Premature Birth	20	...	...	...	...	...	...	...	...	...	...	...	...
54	Injury at Birth	1	...	...	...	...	...	...	...	...	...	...	...	...
55	Debility at Birth	2	...	...	...	...	...	...	...	...	...	...	...	...
56	Atelectasis	1	...	...	...	...	...	...	...	...	...	...	...	...
57	Congenital Defects	3	1	...	...	...	...	...	...	...	...	...	...	...
58	Want of Breast Milk .....	...	...	...	...	...	...	...	...	...	...	...	...	...
59	Atrophy, Debility, Marasmus	1	1	...	...	...	...	...	...	...	...	...	...	...
60	Dentition .....	...	1	...	...	...	...	...	...	...	...	...	...	...
61	Rickets .....	...	...	...	...	...	...	...	...	...	...	...	...	...
62	Old Age, Senile Decay .....	...	...	...	...	...	...	...	...	...	...	...	...	...
63	Convulsions	1	...	...	...	...	...	...	...	...	...	...	...	...
64	Meningitis.....	...	...	...	...	...	...	...	...	...	...	...	...	...
65	Encephalitis .....	...	...	...	...	...	...	...	...	...	...	...	...	...
66	Apoplexy .....	...	3	1	...	...	...	...	...	...	...	...	...	...
67	Softening of Brain .....	...	...	...	...	...	...	...	...	...	...	...	...	...
68	Hemiplegia .....	...	...	...	...	1	...	...	...	...	...	...	...	...
69	General Paralysis of Insane .....	...	...	...	...	...	...	...	...	...	...	...	...	...
70	Other forms of Insanity .....	...	...	...	...	...	...	...	...	...	...	...	...	...
71	Chorea .....	...	...	...	...	...	...	...	...	...	...	...	...	...
72	Cerebral Tumour .....	...	...	...	...	...	...	...	...	...	...	...	...	...
73	Epilepsy .....	...	...	...	...	...	...	...	...	...	...	...	...	...
74	Laryngismus Stridulus .....	...	...	...	...	...	...	...	...	...	...	...	...	...
75	Locomotor Ataxy .....	...	...	...	...	...	...	...	...	...	...	...	...	...
76	Paraplegia .....	...	...	...	...	...	...	...	...	...	...	...	...	...
77	Spinal Cord Diseases .....	...	...	...	...	...	...	...	...	...	...	...	...	...
	Other forms, Brain Diseases .....	...	...	...	...	...	...	...	...	...	...	...	...	...
78	Otitis .....	...	...	...	...	...	...	...	...	...	...	...	...	...
79	Disease of Nose, Epistaxis.....	...	2	...	...	...	...	...	...	...	...	...	...	...
80	Diseases of Eye .....	...	...	...	...	...	...	...	...	...	...	...	...	...
81	Pericarditis .....	...	...	...	...	...	...	...	...	...	...	...	...	...
82	Endocarditis .....	...	...	3	1	...	...	...	...	...	...	...	...	...
83	Myocarditis .....	...	...	...	...	...	...	...	...	...	...	...	...	...
84	Angina Pectoris .....	...	...	...	...	...	...	...	...	...	...	...	...</

